

## **Exhaust Emission Data Sheet 125DSGAB**

60 Hz Diesel Generator Set EPA Emission: Tier 3

**Engine Information:** 

Model: Cummins Inc. QSB7-G5 NR3 Bore: 4.21 in. (107 mm)

Type: 4 Cycle, In-line, 6 Cylinder Diesel Stroke: 4.88 in. (124 mm)

Aspiration: Turbocharged and CAC Displacement: 408 cu. In .(6.7 liters)

Compression Ratio: 17.2:1

Emission Control Device: Turbocharged and CAC

	1/4	1/2	3/4	Full	Full
PERFORMANCE DATA	Standby	Standby	Standby	Standby	Prime
BHP @ 1800 RPM (60 Hz)	60	104	150	197	179
Fuel Consumption (gal/Hr)	3.7	5.9	8.2	10.1	9.4
Exhaust Gas Flow (CFM)	506	768	1041	1161	1133
Exhaust Gas Temperature (°F)	589	718	792	835	821
EXHAUST EMISSION DATA					
HC (Total Unburned Hydrocarbons)	0.59	0.25	0.14	0.07	0.09
NOx (Oxides of Nitrogen as NO2)	2.15	1.87	1.93	2.38	2.15
CO (carbon Monoxide)	2.62	1.58	0.98	0.59	0.71
PM (Particular Matter)	0.17	0.15	0.11	0.08	0.09
SO2 (g/Hp-hr)	0.17	0.17	0.17	0.15	0.16
Smoke (Bosch)	0.51	0.71	0.66	0.64	0.65
			P	II values are Gran	ns per HP-Hour

## **TEST CONDITIONS**

Data is representative of steady-state engine speed ( $\pm$  25 RPM) at designated genset loads. Pressures, temperatures, and emission rates were stabilized.

Fuel Specification: ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and 40-48 cetane

number.

Fuel Temperature:  $99 \pm 9$  °F (at fuel pump inlet)

Intake Air Temperature:  $77 \pm 9$  °F Barometric Pressure:  $29.6 \pm 1$  in. Hg

Humidity: NOx measurement corrected to 75 grains H2O/lb dry air

Reference Standard: ISO 8178

The NOx, HC, CO and PM emission data tabulated here are representative of test data taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits or with improper maintenance, may results in elevated emission levels.